

21A.240
Race and Science
Spring 2004 MIT

PART 1:

THE ALCHEMY OF RACE: MAKING AND UNMAKING SCIENTIFIC RACISM

Lecture 4. February 26

In three weeks, PAPER # 1 is DUE. Let me give you a sense of how to think about it. I write on the syllabus: Students will write three 7-page papers, choosing from a selection of topics to be provided by the instructor for each paper. What kinds of topics will those be? Let me give you a sense of what these might be like — just so you can start to tune in. I'll provide the real topics next time.

1. Explain the place of sex, gender, and reproduction in two eugenic movements/moments documented by Kevles.
2. Discuss similarities and differences between Boas and Du Bois on matters of race classification and science. Consider contexts of immigration, segregation, and health.
3. Compare and contrast notions of racial hygiene in Brazilian and Nazi/German eugenics. Be sure to discuss the place of the "nation" in each case.
4. Use Bowker and Star's ideas about Aristotelian and prototypical classification to examine the workings of race for Blumenbach, Boas, and Gould.

Germ Plasm: American and British Eugenics

Kevles, Daniel J. 1995. *In the Name of Eugenics: Genetics and the Uses of Human Heredity*. Cambridge: Harvard University Press, chapters I-IX, XI-XIII (pp. 3-147, 164-211).

This is a big book with lots of history, taking us from early social Darwinism through mid-20th century population genetics. Some of this later stuff I had you read won't be directly relevant to today, but sets the stage for later history we'll do in this class.

Anyway, we need to think about how to make all of this history manageable for discussion.

So, I have a plan — one which will get us through the different positions enunciated in the history of eugenics, allow us to theorize some the history we've read about, and also allow you to get to know each other some more.

Divide into three groups:

Galton-Pearson-Davenport chapters 1-3

Gospel becomes Popular-Eugenic Enactments chapters 4-7

False Biology, A Reform Eugenics-Brave New Biology chapters 9, 11-12

I would like each group to consider the following questions collectively. What I'll do is give you about 20 minutes to discuss these amongst yourself. At the end of that time, we'll hear a summary from each group. These should be about 15 minutes or so.

1. What are some continuities and discontinuities between the theories and practices of the eugenics movements you've read about in the chapters for which your group is responsible and the racial ideas that we looked at last time (in terms of sex/gender, class, nation)? Think also about differences and similarities from earlier eugenics, if you're in groups 2 or 3.

2. To use Omi and Winant's terms, can you characterize the racial projects of the different people Kevles writes about? And can you identify the racial formation of which they were a part?

Let me refresh your memory on Omi and Winant:

"We define *racial formation* as the sociohistorical process by which racial categories are created, inhabited, transformed, and destroyed." (p. 55)

"we argue that racial formation is a process of historically situated projects in which human bodies and social structures are represented and organized." (p. 56). "from a racial formation perspective, race is a matter of both social structure and cultural representation" (p. 56). Racial formations are made of racial projects. A racial project is "simultaneously an interpretation, representation, or explanation of racial dynamics, and an effort to reorganize and redistribute resources along particular racial lines" (p. 56).

Now, you may have noticed that "race" as such figures differently in different moments, and you might see something like class or nation eclipsing or overdetermining "race" sometimes; so, feel free to speak about class formation, too. Because Kevles is a comparative history of the US and the UK, some of these differences are not surprising.

3. Can you say something about the relationship between science and race in these moments; how does science construct or deconstruct race? And as part of that, tell us something about the various meanings of "race" you detect in the periods you're responsible for. You might even pick out passages in which that term is used.

Just a few comments about Kevles: As you may have noticed, he organizes his history around individual people — kind of Great Man theory of history, even when the men aren't so great! And he uses the word "Man" to stand for humanity, which is annoying. And he often offers a kind of psychological explanation for people's adherence to eugenics.... I'm asking you to squeeze out a more sociological, historical, theoretical story by asking you to use Omi and Winant.

So, about 20 minutes to discuss these questions, search for quotes, etc. Then we'll hear a report from each group — try to get everyone to speak; however you like (by chapter, question, etc.). If you can think of any questions you'd like to discuss with the class as you go along, things you're not sure of, interesting ambiguities that you think we can talk about, do that.

group one will focus on Galton, Pearson, Davenport
group two on eugenic policies — sterilization, IQ testing
group three on reform eugenics and the instability of “race”

GROUP ONE

Galton — coined “eugenics”

Hereditary Genius 1869, interested in MEN and their BRAINS, reputation flows from heredity

page 6, 11: phrenology and humoral balance of Galton (older racial parameters!), interest in Hottentots, shapes of skulls

“Whenever you can, count.” (p. 7) wanted to use STATISTICS to understand heredity (and note that “the word statistics, denoted, in Galton’s time, “state” numbers — indices of population, trade, manufacture, and the link — the gathering of which aided the state in the shaping of sound public policy” (p. 12). *variation from the mean.*

This use of STATISTICS factored out the CAUSES of variation, ASSUMING them to be HEREDITARY.

“For Galton the scientist, the professional classes were the prime repository of ability and civic virtue, and his eugenics made them the keystone of a biological program designed to lead to the creation of a conservative meritocracy” (p. 9) so, aristocracy and working-class not as good.

believed in regression to the mean: It was “in consequence impossible that the natural qualities of a race may be permanently changed through the action of selection on mere variation” (this was actually against Darwin’s theory).

what is A RACE here? an archetype, a fixed thing.
SCIENCE measures it objectively...

Pearson

British socialist background

“In Pearson’s view, Darwinism buttressed Herbert Spencer’s doctrine of individualism and provided a justification of laissez-faire capitalism. But in the England of the 1880s, reformers were forging Darwinism into a weapon against laissez-faire. Pearson soon followed suit, by substituting competition between national groups for individual struggle” “Pearson came to equate morality with the advancement of social evolution, the outcome of the Darwinian struggle with the ascendancy of the fittest nation” (p. 23). NATION is often used synonymously with RACE.

enabled by the fact that Pearson seeks to measure RACIAL DIFFERENCE through STATISTICS, numbers generated by the STATE, which is the representative of the NATION.

Nation should be bred from the best “stocks” (p. 32). PROFESSIONAL CLASS.

Pearson felt that capitalism was to blame for the deterioration of Britain; the demand for cheap labor pressed poor people to have many children. Private charity was worse still, and encouraged continued profligacy on the part of the poor. "Natural selection, he believed, had been suspended and replaced by 'reproductive selection' which gave the battle to the most fertile, not the most fit" (p. 34).

CONTRADICTION HERE?

Place of women in Pearson's theory? (Male Female club). Socialist ideas, supporter of women's rights, sexual emancipation, 'voluntary motherhood'. Only if women had full education, job opportunities, sexual education, reproductive options, could they freely make eugenic mate choices (if they could support themselves, they wouldn't be forced to marry prematurely; if they had scientific training, they could tell a good man when they saw one).

The views of British eugenicists like Pearson incarnated prevalent British ideas about the differences between classes; much of this had to do with upper and middle class prejudices about unfettered lower class sexuality.

What is RACE here? "national eugenics": "the study of agencies under social control that may improve or impair the racial qualities of future generations either physically or mentally" (p. 37).

race is nation, race is a general category of physicality. vague.

Davenport

In the US, concerns with 'race' mixture and with the possible degeneration of Euro-American stock came into vogue as the US was 'infiltrated' by immigrants from Eastern Europe.

Charles Davenport founded a eugenics research center (this meant starting an archive of human pedigrees [useful for tracing inheritance of Mendelian units {Davenport's eugenics was somewhat different from Pearson's and Galton's which were more 'biometric'}]) in 1904 at Cold Spring Harbor.

Davenport believed that immigrants ('races' like Jews, Irish Catholics, Italians, etc) threatened the 'nation's germ plasm'.

Aside about Weismann — sequestered germ cell line. disallowed Lamarckian inheritance (define). But used to buttress claims about genetic essentialism, dismissing environment.

so, germ plasm, protoplasm, became a racial essence.

protoplasm as a scientific term that also functioned as **cultural representation of genetic essence**

"Like many of his colleagues, Davenport equated national and "racial" identity, and assumed as well that race determined behavior. He held that the Poles, the Irish, the Italians, and other national groups were all biologically different races; so, in his lexicon, were the 'Hebrews'" (p. 46).

"Believed that the European nations sent over disproportionately large numbers of the worst human stock " (p. 51).

Good human stock to be found in the middle-class.

NEGATIVE EUGENICS: immigration restriction, sterilization

Davenport also advocated what was to become the mainline eugenics view of the role of women in population betterment: motherhood in the service of the nation, the race (*often completely conflated [actually, I don't think conflated is the right word; nation and race are not empirically distinct things waiting to be conceptually decoupled; as categories, they were mutually constituted, and though now we think it important to distinguish them, I think it was by no means clear at the turn of this century how they were going to get delineated]*). Women should not enter higher education because this would divert their energies from their natural duties (this Victorian stuff won't go away).

GROUP TWO

Gospel becomes popular: people filling out records of family traits, to be sent to Davenport. local organizations, like the "Race Betterment Foundation"

Fitter families contests at Kansas fair.

Eugenics congresses with illustrious participants. "race hygiene" (what is RACE? seems to oscillate between meaning the HUMAN RACE, a NATION, those people who are or should be MOST REPRESENTATIVE OF THE HUMAN RACE. This oscillation, this slippage is HOW race comes to mean so many things; it becomes a flexible term. As a cultural representation, it becomes extraordinarily fluid.

The continued use of STATISTICS continues to conflate environment, heredity, and ideas about things. In Omi and Winant's terms, we could see this as a tool for cultural representation, a tool that appears to be objective because it is quantified and backed up by credentialed experts who claim that they are best suited to interpret it.

def of civilization in *Britannica*: "The organic betterment of the race through wise application of the laws of heredity" (p. 63).

RACE seems to be slipping in and out of synonymy with NATION, SPECIES and the location of racial essence is in PROTOPLASM.

NATURE a source of **moral** lessons: a cultural representation filtered through science

Diversity of ideological attachments to the project; DIFFERENT RACIAL/CLASS PROJECTS

social-radical wing: abolish class difference and the best stocks will be revealed! (87)
suffragettes: women need to be allowed independence so they can make eugenic decisions

mainline: women are baby-machines, class distinction must be kept in place

(contrast between social-radicals and mainline: is kind of like sexual selection ideas in Darwin -- like animals and humans!)

belief that "artificial selection was replacing natural selection in human evolution) (p. 71).

CONTRADICTIONARY IDEAS about FITNESS

what does KEVLES suggest are the social causes of EUGENICS in US?

idea that immigrants were breeding more in US, that they were breeding from "less fit" portions of their group. idea that these social inefficient were taking TAXPAYER'S MONEY. WELFARE. SOCIAL STRUCTURAL CONCERNS

At the beginning of the century, there was a decline in the US 'white' birth rate owing to urbanization, and Teddy Roosevelt inferred from this that the upper-class in the US was committing 'race suicide' and that 'race purity must be maintained.' (p. 74). Early 20th century feminist projects of birth control were often co-opted into this rhetoric and "what was a 'right' for the privileged became a 'duty' for the poor" (Angela Davis 1981).

Irish Catholics become a "race" in part because of ideas about their supposed rampant reproductivity?

Aside about Margaret Sanger

Margaret Sanger, initially a socialist who saw birth control as a necessary step in women's emancipation, saw the bearing and rearing of many children as the cause of women's oppression.

As time went on Sanger brought her concerns with birth control for middle-class women into line with a concern about population control for minority and lower-class women.

When Sanger left the socialist party, her ideas became more connected to eugenic ideas. In 1919, Sanger summarized one of the goals of birth control thus: "more children from the fit, less from the unfit" (p. 90) (this designated mental defectives, etc) (In 1939, she and others planned a 'Negro Project' which was aimed at reducing the birth rate among blacks { Sanger's whole position on this was kind of complex [well, not really]: she claimed that while 'negroes' were not inferior to 'whites', the sector of the negro population which was 'reproducing' the fastest was that sector which least knew how to exercise prudent choice about how many offspring to have; the 'negro project' would target these people.

In sterilization of the feeble-minded, a large number of poor people were targeted, as you saw. Given the racial hierarchy of the US, this also meant that large numbers of Negroes and Indians were sterilized.

"If natural selection yielded the Darwinian fit, only artificial selection, - by governmental means, where appropriate - could multiply the eugenically fit."

IQ

mental age/chronological age

Army IQ tests as “the fit really significant contribution to the study of race differences in mental traits” (p. 82).

RACE starts to be associated with differences in INTELLIGENCE. measurement again. IQ as heritable. national decline became a decline in Intelligence. Again, concerns of the professional academic class interested in these things became the measure for all.

critics; Catholics against biological reductionism

GROUP THREE

Reform Eugenics: politics on the left and right

There begins to be dissonance between eugenics and the new genetics. Human genetics begins to be treated mathematically, statistics are no longer about an inferred heredity, indirectly assayed through family histories, but about gene frequencies. Mathematical models of how genes work in populations can be tested against statistical data.

Human genetics (and genetics generally) were brought under the yoke of mathematics, and evolution, long described from the point of view of reproductively successful individuals and prosperous or declining species, came to be described as changes in gene frequencies over generations.

Many of the population geneticists involved in this revamping were socialist eugenicists [NOT R.A. Fisher]. These ‘reform eugenicists’, as Kevles calls them, were confident that eugenics programs could work to better the species, but that real hereditary inequality couldn’t be properly seen until the social playing field was even; not till there was a classless society could eugenics make any sense.

Because these people didn’t buy idea that existing social divisions by race and class were determined by innate inequality, they favored talk of ‘populations’ to talk of ‘race.’ (p. 175).

In weird way, these ideas lay behind this notion of EUTELEGENESIS (p. 188). You really COULD treat people as though they were just bags of genes (of course what this does is fetishize sperm).

Evelyn Fox Keller has discerned in this a masculine bias of mathematical population genetics. In this discourse, all individuals are structurally equal, all just bags of genes. Keller writes that, “Effectively bypassed with this representation were all the problems entailed by sexual difference, by the contingencies of mating and fertilization that resulted from the finitude of actual populations and also, simultaneously, all the ambiguities of the term reproduction as applied to organisms that neither make copies of themselves nor reproduce by themselves” (1992b: 132).

Brewer called eutelegensis the “the socialization of the germ plasm” (p. 190).

population genetics: a cultural representation part of a racial project that sought in part to dismiss prevailing race prejudice as misleading about “actual genetic facts”

contrast with earlier uses of STATISTICS

Their eugenic ideas were connected less to class and race issues than those of mainline eugenicists. Muller, Haldane, and Huxley believed in conscious social direction of human biological evolution, and they thought that they were developing the tools to understand how to weed out deleterious alleles (population genetics had excellent mathematical models for single locus genetic traits), which manifested themselves in 'undesirable' phenotypes.

On the way to the revolution, some few things might be done; eugenic counseling might aid couples in deciding if they wanted to bear children together; the state might help eugenically fit families finance having kids (this sense that fitness is best judged by humans rather than in the court of reproductive success continued); mental deficient might be sterilized (now that I list it, it all sounds very much like the usual totalitarian project).

FISHER

RA Fisher had a bizarre idea to help 'fit' families {those hereditarily intelligent enough to abstain from 'reproducing' in a social environment which punished them for doing so [no accident, I suppose that their intelligence would be served by a refined moral sense [but too bad it went along with low fertility; how paradoxical and troubling!]]}: Fisher suggested governmental support for eugenically fit families that would guarantee them no drop in standard of living with more children; if it took an upper class family \$100,000 to raise one kid, the government should provide them with \$100,000 if they decided to have another one).

the eugenic paradox: "If success in the Darwinian sense meant high fertility rates, then in modern Western society evolutionary success went together with social failure, and social success with evolutionary defeat" (p. 182).

Fisher: 'Professionals were 'destroying their racial stock as rapidly as any communist would wish to see the intelligentsia extirpated'

"The eagerness to foster higher fertility among the eugenically valuable fortified reform eugenicists in their embrace of meliorative economic measures or socialist reconstruction. Yet to some on the eugenic left, particularly biologists, social measures would not by themselves make the eugenicists utopian dream of man's eugenic improvement a reality." (Kevles 1985).

For Muller and Haldane, a sexual revolution needed to happen alongside a social and scientific revolution. So, explicit talk of "race" starts to vanish. BUT ideas about gender, roles of women and men don't change too much.

Next time:

we're going to go back in history somewhat and look at another venue in which science was making pronouncements about race, this time **anthropology** led by Franz Boas in early 20th century and sociology of W.E.B. DuBois. This is a parallel history and I want us to think about some of the ways the category of *race* was distinguished from *culture* — and therefore reified — in the context of debates about American belonging, immigration.